

The safety management evaluation conducted by the Office of Oversight identified several opportunities for improvement. These potential enhancements are not intended to be prescriptive. Rather, they are intended to be reviewed and evaluated by the responsible DOE and contractor line managers and prioritized and modified as appropriate, in accordance with site-specific programmatic and ES&H objectives.

1. Strengthen AL, KAO, and SNL leadership of ES&H programs.

- Better define the AL and KAO approach and responsibilities for enhancing line management oversight of SNL and optimizing the use of all available resources, including Facility Representatives, KAO subject matter experts, and AL/DP technical support.
- Ensure that coordinated and consistent DOE direction is provided to SNL through KAO and the Site Integration Control Board.
- Assume a more aggressive stance in exercising visibility and leadership at SNL by increasing senior management involvement in facilities and in key safety management issues.
- Ensure that ISMS implementation provides meaningful and substantive improvement and is not merely a repackaging of existing programs.

Through the involvement and intervention of AL, KAO, and SNL senior managers:

- Eliminate barriers to establishing institutional processes caused by the organizational autonomy of SNL divisions.
- Address the perception held by some SNL divisions that institutional processes for hazard analysis, work planning and control, and assessment activities are an encroachment on their organizational autonomy.

2. Clarify DOE and SNL roles and responsibilities and strengthen individual accountability.

- In response to the 120-Day Study, develop a transition plan to describe the new roles and responsibilities for DP and AL as an ES&H support resource for AL area offices and the pooling of DP and AL technical support resources. The transition plan should explicitly address the interface between KAO and support resources, including AL's OTMO and DP technical personnel.
- Clarify and, where possible, simplify the complex interactions among programs, organizations, and managers responsible for buildings at SNL.
- Ensure that ES&H professionals deployed to the line organizations have sufficient independence and autonomy to raise and resolve ES&H issues.
- Improve the Line Implementation Working Group's effectiveness in coordinating line ES&H requirements throughout SNL.
- Ensure that accountability measures are in place and are used effectively for DOE and SNL line managers and organizations, including development of clear criteria for

evaluating managers and establishing individual accountability for correcting identified deficiencies.

3. Strengthen the DOE and SNL requirements management processes.

- Establish formal processes for AL reviews and transmittal of DOE directives.
- Expedite the AL review, processing, and transmittal of new requirements to SNL.
- Facilitate safety improvements in programs where there is currently limited regulatory guidance.
- Develop a systematic approach to incorporate new requirements into policies and procedures to achieve a more consistent flowdown of requirements to lower-tier documents at the working level.
- Define an SNL approach for tailoring requirements to the hazards of specific facilities and work activities.
- Ensure that subcontractor ES&H plans and activities receive adequate review by ES&H subject matter experts.

4. Establish a more structured process for planning and controlling work activities, including appropriate hazards analysis using the ISMS core functions.

- Strengthen the work planning process by establishing clear expectations and an institutional framework for hazards analysis for all work activities; increasing involvement by workers in hazards identification, hazards analysis, and work planning; and establishing a strong link between hazards analysis and hazards controls.
- Ensure that the Integrated Safety, Environmental, and Emergency Management System, primary hazard screening, and hazards analysis modules are validated and updated by a multidisciplinary group of knowledgeable personnel so that it provides technically accurate, complete, and repeatable results.

- Establish a more structured process for DOE's involvement and approval of SNL's use of the Integrated Safety, Environmental, and Emergency Management System, particularly for hazard classification determination.
- Formalize work processes to establish adequate administrative controls and to conduct work within these controls, including development of clear processes for authorizing work.
- Establish, reinforce, and develop an implementing procedure to address management expectations and policy for adherence to and use of procedures.
- Stress rigorous and proactive planning for potentially hazardous activities, such as modifications to nuclear facilities.

5. Strengthen the DOE and SNL assessment programs and integrate them into ISMS.

- Maintain management attention to and sustain efforts to address the current shortage of qualified Facility Representatives, improve retention in the future, and achieve an optimal balance between field presence and completing qualification requirements.
- Increase the use of KAO and AL subject matter experts in operational awareness of contractor performance, to include teaming with KAO Facility Representatives.
- Until achieving an effective SNL self-assessment program, as described by DOE P 450.5, *Line Environment, Safety, and Health Oversight*, establish a DOE program for multi-function appraisals of SNL ES&H performance and include the assessment of cross-cutting management systems, such as training, self-assessment and corrective actions, hazards analysis, work control, and requirements management.
- Establish requirements and increase the level of direct DOE verification and validation of contractor self assessment findings in the Annual Contractor Performance Appraisal process.
- Establish formal E&SH self-assessment programs for AL and KAO.

- Broaden SNL “self-assessment” processes to ensure proper emphasis on monitoring of performance elements, such as witnessing work activities, inspecting completed maintenance work, conducting interviews to determine the level of worker ES&H knowledge, auditing training, observing operators performing procedure steps, and reviewing required documentation.
- Establish formal SNL mechanisms to assess the implementation of functional area programs and cross-cutting issues such as maintenance, work control, training, requirements management, corrective action, and occurrence reporting from a sitewide perspective.

6. Strengthen SNL and KAO issues management systems to ensure correction of deficiencies and effectively evaluate sitewide ES&H performance.

- Develop and/or strengthen formal DOE and SNL processes to capture issues and deficiencies and track corrective actions to include verification/validation elements and allow trend analysis and performance assessment.
- Establish effective mechanisms to analyze all SNL ES&H deficiencies from a sitewide perspective to ensure that adverse trends and generic issues are identified and addressed in a timely manner.
- Establish mechanisms in SNL work control processes for documented feedback from workers on difficulties, suggestions, positive elements, or other lessons learned from work activities.

- Develop sitewide procedures to strengthen implementation of the Occurrence Reporting and Processing System, including conservative reporting and categorization of events, thorough root cause analysis, and development of a complete set of corrective actions which preclude the recurrence of similar events.
- Strengthen the processes for ensuring which corrective actions for cross-cutting and recurring deficiencies are incorporated into the resource allocation and prioritization process.

7. Strengthen the implementation of DOE and SNL sitewide training.

- Develop job qualification training programs for maintaining the technical competence of positions such as ES&H Coordinators, building managers, technicians, crafts personnel, and maintenance personnel.
- Ensure that training programs receive appropriate attention and funding as responsibility for these programs transitions to the line programs.
- Establish a process both at KAO and SNL for monitoring the effectiveness of training throughout the site.
- Place increased emphasis on development of analytical skills in the SNL training programs.
- Identify and address factors that are causing DOE personnel to be slow in completing qualification competencies for the Technical Qualification Program.
- Establish ES&H training requirements to ensure that subcontractors, including those that are not assigned to the site on an ongoing basis, have an adequate understanding of hazards relevant to their assignments.